SIEMENS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

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Inventor:	R. Pavlik et al.	)	
		)	Group Art Unit: 2109
Serial No.:	10/510,312	)	
		)	Examiner: Li, Guang W.
Filed:	10/01/2004	)	Confirmation No. 6251

Title: WEB SERVER COMPRISING INTEGRATED AUTOMATION
FUNCTIONALITY AND ACCESS TO A REALTIME OPERATING SYSTEM

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APPELLANT'S BRIEF UNDER 37 CFR 41.37

Sir:

This brief is in furtherance of the Notice of Appeal filed in this application on October 31, 2007. A Fee Transmittal is transmitted concurrently with this paper to authorize the payment of the fee required for submittal of this brief.

(Please proceed to the following page.)

1.   REAL PARTY IN INTEREST - 37 CFR 41.37(c)(1)(i)

The real party in interest in this Appeal is the assignee of the present application, Siemens Aktiengesellschaft.

2.   RELATED APPEALS AND INTERFERENCES - 37 CFR 41.37(c)(1)(ii)

There is no other appeal, interference or judicial proceeding that is related to or that will directly affect, or that will be directly affected by, or that will have a bearing on the Board's decision in this Appeal.

3.   STATUS OF CLAIMS - 37 CFR 41.37(c)(1)(iii)

Claims cancelled: 1 – 9.

Claims withdrawn but not cancelled: None.

Claims pending: 10 - 29.

Claims allowed: none.

Claims rejected: 10 – 29.

The claims on appeal are 10 - 29. A copy of the claims on appeal is attached hereto in the Claims Appendix. Appellants respectfully appeal the final rejection of claims 10 – 29.

4.   STATUS OF AMENDMENTS - 37 CFR 41.37(c)(1)(iv)

In response to the Final Office Action mailed on August 9, 2007 an amendment was filed under 37 CFR 1.116 on September 19, 2007. Amendment to Claim 28 was presented in that Response to correct a grammatical error of an apparent nature and thereby place this application in better condition for this appeal. Although the Advisory Action mailed September 28, 2007 is silent as to whether or not the amendment was entered, applicants believe it is the Examiner's intention to so enter the amendment. Out of caution, however, the copy of the claims on appeal

(attached hereto in the Claims Appendix) indicates the most recent changes to claim 28 relative to the immediate prior version by presentation of those changes with appropriate underlining to indicate added text and strikethrough to indicate deleted text.

In the Response filed under 37 CFR 1.116 on August 9, 2007, a request for reconsideration of the rejected claims was considered but it was still not seen from the argument presented how the finally rejected claims patentably distinguish over the applied art. The amendment and argument presented were not found to place the application in condition for allowance. Accordingly, applicants are proceeding with this appeal.

5.   SUMMARY OF THE CLAIMED SUBJECT MATTER- 37 CFR 41.37(c)(1)(v)

Referring initially to page 10, lines 20 – 25 and Figures 2 and 3 of the application, the invention relates to a web server having software modules that are integrated into the web server, whereby at least one first software module 37 provides for the implementation of an automation functionality and a second mechanism 63, 65 provides for accessing a realtime operating system 52. The three independent claims presented on this appeal are claims 10, 29 and 30.

Claim 10 is directed to a web server while claims 29 and 30 are, respectively, directed to an automation system and a computer program product. Claims 29 and 30 each recite subject matter similar to that presented in claim 10, i.e., a first software module and a second software module. These features are now described in detail with respect to claim 10, but the following description also provides a concise explanation of the subject matter defined in claims 29 and 30, thereby satisfying all requirements for a summary of the claimed subject matter as defined in each of the independent claims.

In the past, the classical world of automation has had little relation with the internet because proprietary protocols have been predominantly employed in automation engineering. In one embodiment (see page 1 and Figure 1), the invention defined in independent claim 10 provides a web server 3, 10 or 15 which links web technology and automation technology with an extension module 4, 11 or 16 integrated directly into the web server, e.g., a software module providing the required automation functionality in the web server such that the enhanced web server functionality can include performing complex functions concerned with classical

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automation engineering and as well as conventional web server functions, e.g., in the consumer sector. As a result of direct integration of automation functionality into the web server 3, 10 or 15, existing web implementations can also be utilized when handling the automation function. In order to permit the utilization of web technologies for realtime applications, web servers according to the invention include realtime operating systems. The foregoing is to be contrasted with prior art schemes such as those disclosed by the Modeste reference (U.S. 2003/0056012) where a gateway connection to the internet interfaces with a supervisory home automation controller (with embedded software) or a networked home pc. In this regard, see Modeste (of record) at page 1, paragraph [0004], which further describes a classical arrangement wherein a supervisory controller (with embedded software such as described in Figure 8 therein) is in turn coupled to an assortment of devices including "smart" appliances and digital meters. See also paragraph [0040] of Modeste.

As described at page 5, line 21 to page 6, line 19 and shown in Figure 1 of the application, a teaching of the present application is that a standard web server may be configured with software modules in such a way that it is also capable of performing the automation functions, i.e., without requiring a separate controller. Accordingly, the web server 3 contains an extension module 4 which takes over the functions of a stored program controller facility (SPS) or programmable logic controller (PLC). To this end, the extension module 4 as part of the web server 3 is connected directly through a connection 5 to an input/output module 6 of an automation system. The first web server 3 is thus used not only for supplying information by way of the connection 2 onto the internet 1, but can perform complex control functions as a result of the integration of the extension module 4. As already noted with respect to the Modeste reference, such functions were in the prior art only executed by independent stored program control facilities.

Figure 1 of the application (see also page 6, lines 10-18) also shows, in a further embodiment, a web server 10, which comprises an extension module 11 having CNC functionality (CNC=Computer Numerical Control). By way of the extension module 11, the second web server 10 controls a computer-controlled machine tool 13 (CNC machine tool) which may be used for high-speed and precision manufacture of complicated turned and milled parts. Complicated control functions of this type are normally executed by computers individually specified for the purpose.

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In still another embodiment, also shown in FIG. 1, (see page 6, lines 20 – 30), control of a drive 18, also a complex control task, is handled by a third web server 15 which contains an extension module 16 capable of handling the exacting functions involved in control and regulation of the drive 18. In numerous embodiments, as illustrated for the web servers 10 and 15, the servers may be linked by way of a firewall 8 to the internet 1 to prevent invalid access attempts over a communication link 7 to one of the web servers and thus to the drive 18 or the machine tool 13.

With reference to page 6, lines 30-40 (see again Figure 1), the web server may take the form of the embedded web server 20 which includes an extension module 21 that contains a temperature regulation facility for controlling a valve 22. In addition to the automation functionality of the extension modules, each of the web server embodiments may offer the full functionality and thus all the advantages of a standard web server such as the illustrated web server 24. Thus a web browser 26, also shown in Figure 1 (see page 7, lines 1-10), may be linked by way of the internet 1 to access any of the web servers 3, 10, 15 and 20 (which include the automation functionality), using web technologies, and thereby provide, for example, an operator control and monitoring system. The embodiments illustrated in FIG. 1 illustrate scalability of the solution proposed here compared with conventional approaches wherein the automation functionality is separate (e.g., in a discrete controller) and distinct from the web server function.

With reference to page 7, lines 27 – page 8, line 14, and as shown in Figures 1 and 3, a web server 3 according to claim 10 includes software modules (e.g., an operating system 50), wherein at least one first software module 61 comprises a first mechanism 61, 62 for implementing an automation functionality and a second mechanism 63 for accessing a real-time operating system 52. In industrial automation systems, real time operating systems provide reaction times in the microsecond range.

6. GROUNDS OF REJECTION TO BE REVIEWED UPON APPEAL - 37 CFR 41.37(c)(1)(vi)

The grounds for rejection to be reviewed for each the pending claims 10 – 29 are as follows:

Claims 10 – 29 were all rejected under 35 U.S.C. 102 as anticipated by U.S. 2003/0056012 (Modeste).

7. ARGUMENT - 37 CFR 41.37(c)(1)(vii)

APPELLANTS TRAVERSE ALL REJECTIONS UNDER SECTION 102 BASED ON MODESTE.

7A. ALL OF THE REJECTIONS UNDER SECTION 102 OF CLAIMS 10-29 ARE IMPROPER BECAUSE THE REJECTION OF THE INDEPENDENT CLAIMS 10, 28 AND 29 BASED ON MODESTE IS IMPROPER.

The Appellants traverse all of the Section 102 claim rejections first on the basis that the rejection of claims 10, 28 and 29 under 35 USC 102(b) is in error and all other claims depend therefrom. The cited prior art Modeste reference fails to disclose each and every element as set forth in the independent claims.

MPEP §2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The identical invention must be shown in as complete detail as contained in the claim.

7B. CLAIM 10 IS NOT ANTICIPATED BY THE MODESTE REFERENCE.

The prior art reference relied upon by the Examiner in the §102 rejection of claim 1 does not contain every element and limitation recited in the independent claim 10. The Examiner and

the appellants are in disagreement as to what the reference discloses or suggests. In multiple responses numerous citations from the Modeste reference have been presented to show that the rejection is deficient because one or more of the elements defined in independent claim 10 cannot be read upon this reference. As an example, claim 10 requires a web server that comprises software modules wherein:

"at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system."

In the advisory action mailed 09/28/2007 the Examiner acknowledges that the Modeste reference shows an arrangement including two separate and distinct components: C-Gateway (element 30) and C-Automation Controller (element 60). See Figure 1 of Modeste and note, also, that none of the figures so much as imply that the element 30 might incorporate the element 60. Note, especially, Figure 3 of Modeste which, as described at page 3, paragraph [0040] describes "an automation controller (MC1) 180 serially connected to the gateway." See, also, Figure 8A of Modeste which expressly describes the discrete C-Automation Controller as having embedded software. Thus the controller (element 60 or element 180) is not at all disclosed as a portion of the same software deployed on the gateway 30.

Nonetheless, in the advisory action the Examiner argues that, notwithstanding this distinction, and because the disclosure by Modeste of a "Gateway conncted [sic] with controller that provided automation functionality" results in automation functionality, "the functionality is the same as claim invention ... and [t]herefore the software module would be within the server."

Appellants are unable to follow the Examiner's reasoning and cannot find any logical basis for supporting the conclusion. Appellants have repeatedly urged that Figure 1 of the Modeste reference is inconsistent with the claimed invention (because it expressly shows an automation controller 60 separate and distinct from the gateway 30). As confirmed by the above-quoted language taken from the advisory action, the Examiner does acknowledge applicants' contention that a controller connected to a gateway 30 does not make that controller part of a server. As best understood, the only inference which can be drawn from the Examiner's response to this distinction is that the Examiner might be suggesting that his basis for rejection might be under Section 103 instead of under Section 102, but the Examiner provides no support

for this either. It is only of record that, because the appellants have claimed a web server comprising software modules with a first mechanism for implementing an automation functionality, it is somehow permissible to extend beyond the disclosure of Modeste and still conclude that Modeste discloses applicant's claimed software module (having the mechanism for implementing software functionality) as though it were in Modeste's gateway 30. Again, the apparent reasoning for taking this liberty is, as stated in the advisory action (mailed 09/28/2007) in Ser. No. 10/510,312, that

> "Modeste teaches Gateway conncted [sic] with controller that provided automation functionality."

Not only does this require an impermissible modification of a reference being applied under Section 102, but further, the very statement made by the Examiner admits that Modeste requires a controller, separate and apart from a gateway to provide an automation functionality and it is only ion hindsight of the present invention that the Examiner is reconstructing the prior art. That is, the Examiner has admitted that the reference is different. Applicants are not claiming two distinct and well-known components. Rather, applicants are claiming a web server with two functionalities via one or more software modules providing:

"a first mechanism for implementing an automation functionality and a second mechanism to directly access the real-time communication level of a real-time Ethernet." [See claim 10.]

As already admitted by the Examiner in the advisory action this is **not the same** as what Modeste discloses: "two distinct and well-known components." With this difference acknowledged by the Examiner, it is not understood how the Examiner can make a rejection under Section 102. Nor can a rejection be made under Section 103.

The following analysis goes still further, to address the Examiner's more detailed basis for rejecting claim 10 as presented in the initial Office Action mailed May 11, 2007. In the intial rejection the Examiner cited passages in the Modeste reference for disclosing a software platform including the element 30 (gateway) of Figure 2A. The rejection also referenced Fig 2B and Par. [0084]. Figure 2A is described as showing the system of Figure 1 (Modeste) in more

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detail. See par. [0038]. Figure 2B more precisely depicts the gateway 30 functionality in regard to the web communicator 34. See paragraph [0039].

The Examiner alleged that the above-listed citations from the Modeste provided applicants' "first mechanism for implementing an automation functionality" because the Modeste reference concerns "home automation functionalities that obtain with respect to the home and its install devices ... [see page 3 of the Office Action mailed May 11, 2007]." However, none of this is the same as what the appellants have claimed. In fact, the referenced arrangement of Modeste is no more relevant to the patentability of the claims than is the very art already cited by the applicant.

These deficiencies are apparent when comparing an embodiment of the claimed invention as illustrated in Figure 1 of the application with Figure 1 of the Modeste reference. Note, for example, in Figure 1 of the present application, the extension module 4 of the web server 3 is connected to an input/output module 6 of an automation system (as described at par. [0020]. Figure 1 of the Modeste reference is inconsistent with the claimed invention. The web server of claim 10 requires "at least one first software module [that] comprises a first mechanism for implementing an automation functionality ..." while the Modeste reference expressly shows an automation controller 60 (having the automation functionality) separate and distinct from the gateway 30. As stated at par. [0036] of the Modeste reference the "gateway 30 is coupled over an RS232 data link to a home automation controller 60 ... [and] devices 70, 80 and 90 are coupled to the controller ..."

The foregoing is clearly different from the arrangement wherein the "automation functionality" is within a software module of the web server instead of being, for example, in a separate controller. Applicants' claimed software module having "automation functionality" is expressly within each of the illustrated the servers 3, 10 and 15.

In comparison to the claimed invention, the element 30 of the Modeste reference (see Figures 1 and 2A) appears to be no more than a "gateway" between a remote website server 20 and a local, but separate and distinct controller which contains the automation functionality needed to operate the devices 70, 80 and 90 in a user's home. See pars [0034] and [0036]. Note also paragraphs [0079] and [0080] of the Modeste reference which describe the automation functionality of the controller 60 as well as describe a flowchart (Figure 21) of the automation controller embedded software. All of the foregoing conclusively establish that the Modeste

reference only discloses an automation controller separate from a gateway 30 such that it is not possible to construe (or reconstruct) the prior art to find a web server which provides "a first mechanism for implementing an automation functionality."

To confirm this deficiency and that the prior art is misunderstood, reference is made to figures 2A and 2B of the Modeste reference which are presented therein to illustrate the system of Figure 1 in more detail (see paragraph [0037] of Modeste) and to more precisely depict the gateway 30 functionality (see paragraph [0039] of Modeste). Neither of these figures, nor any text or any other illustrations in the reference, disclose the automation controller 60 as part of the gateway 30. Nor is it appropriate for the Examiner to "create" a web server which reads on claim 10 by "redefining" the components shown in the figures.

Specifically, the Examiner cannot call the combination of gateway 30 and controller 60 a "web server" because the Modeste reference already discloses separate web server functions within the gateway 30, e.g., web server 140. Thus when the gateway includes a discrete and complete web server 142 as shown in Figure 2A, it is inconsistent to equate the entire gateway 30 plus the automation controller 60 with applicants' claimed web server that integrates functions shown to be discrete in the prior art. With Modeste providing the controller 60 with its own embedded software, separate and apart from software of the web server 140, it cannot be said that the web server 142 comprises "at least one first software module [that] comprises a first mechanism for implementing an automation functionality ..." Rather, all of the automation functionality disclosed by the Modeste reference appears to reside in the automation controller 60. There is no disagreement in the record on this point.

The appellants seek to illustrate that if the Examiner were to contrast Figures 1 and 2 of the present application with the lack of disclosure in the Modeste reference, it will be apparent that the prior art does not disclose the subject matter of claim 10. The rejection cannot be sustained because it is error to blur the distinction between two distinct and well-known components. In fact, in order to make this rejection the Examiner had to use undue discretion to redefine the subject matter disclosed by the prior art and then blur the distinction between the gateway 30 and the controller 60 of Modeste. This is a hindsight reconstruction under a Section 102 rejection.

A server is a server and a controller is a controller. The mere fact the Modeste reference discloses a controller connected to the gateway 30 does not make that controller part of a server.

That is appellants' invention. Also, although it has been brought to the Examiner's attention, the Examiner does not acknowledge the convention used in the Modeste reference wherein components which are part of the gateway are clearly illustrated as being in the same schematic box used to denote the gateway 30. See, for example, Figure 2A and Figure 5 of Modeste which each illustrate another controller 100 (not the claimed invention) which is inside of the schematic box used to define the gateway 30. With this conventional method of illustration, there is no basis to argue that the automation controller 60 is part of the gateway 30. Rather, in order to make the rejection, it has been necessary to over reach and blur the prior art distinction which segregates two functions: a server function and the function of an automation controller. This discretionary blurring is not a legitimate basis to deny appellants their right to the patentably distinct subject matter of claim 10.

Furthermore, in making the rejection, the Examiner has not fully accounted for placing the software module in the web server. That is, with an unsupportable blurring of the distinction between a web server and a controller, the Examiner apparently sees no need to disagree with the appellants that the software or mechanism of Modeste (which contains automation functionality) is in the controller, (which is not part of a server).

. Again, MPEP §2131 provides that a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. This rejection cannot be properly supported because it requires undue discretion to redefine, i.e., reconstruct, the reference, to create the claimed invention. It is only the appellants who teach the combination of claim 10. Embodiments according to the invention result in a web server having its functionality expanded in such a manner (e.g., with the claimed software module) that the server can handle both complex functions associated with classical automation engineering and lesser tasks such as those useful in the consumer sector. The referenced arrangement of Modeste is no more relevant to the patentability of claim 10 than is the very art already cited by the appellants. It is only the appellants who teach direct integration of automation functionality into a web server and the prior art disclosure of Modeste is illustrative of prior art that is consistent with this distinction.

In summary, Figure 1 of the Modeste reference is inconsistent with the invention of claim 10 because it expressly shows an automation controller 60 separate and distinct from the gateway 30. The Examiner does not have the discretion to reconstruct the reference by "redefining" an

automation controller to become part of a server. This is made even more questionable because, as stated at par. [0036] of the Modeste reference, the "gateway 30 is coupled over an RS232 data link to a home automation controller 60 ..." This is clearly different from the claimed arrangement wherein the "automation functionality" is within a software module of the web server instead of being, for example, in a separate controller coupled to a server through an RS-232 interface. Only the software module of the claims, having "automation functionality" is within the server 3.

Any rejection under Section 102 must identify each element of the claimed subject matter. Clearly the disclosure of Modeste does not meet the requirements for the web server device of claim 12. Thus Appellants must disclose subject matter, distinct from the Modeste reference, which is covered by claim 10.

7C.   NONE OF THE OTHER INDEPENDENT CLAIMS 28 AND 29 ARE ANTICIPATED BY THE MODESTE REFERENCE.

Claims 28 and 29 were also rejected under Section 102 based on the Modeste reference. Claim 28 is directed to an automation system "comprising a web server, wherein the web server comprises software modules, wherein a first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system." For the same reasons presented with respect to claim 10, the Modeste reference does not disclose the claimed combination. Specifically, the Modeste reference at least lacks disclosure of a software module of a web server which "comprises a first mechanism for implementing an automation functionality ..."

Claim 29, directed to a computer program product comprises "a web server comprising software modules, wherein a first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system." The same reasons presented with respect to claim 10, preclude rejection of claim 29 based on the Modeste reference which does not disclose a software module for a web server which "comprises a first mechanism for implementing an automation functionality ..."

7D.   PATENTABILITY OF EACH CLAIM SHOULD BE SEPARATELY CONSIDERED.

All claims have been rejected, each solely on the Modeste reference The foregoing general argument, based on deficiencies of the Modeste reference, demonstrates patentability of all claims. However, none of the rejected claims stand or fall together. This is because each dependent claim defines a unique combination that further patentably distinguishes over the art of record. Patentability of each dependent claim is separately argued and should therefore be separately considered. Argument demonstrating patentability of each dependent claim is presented under subheadings identifying each claim by number. The Board is requested to consider each argument presented with regard to each dependent claim because each of the claims further distinguishes over the prior art. However, the Examiner's application of the Modeste reference to reject the dependent claims does nothing to compensate for the above-noted deficiencies in the rejection of the independent claims based on the Modeste reference

7E.   EACH OF THE DEPENDENT CLAIMS 11-27 IS PATENTABLE AND FURTHER DISTINGUISHES THE INVENTION OVER THE PRIOR ART.

7E(1). CLAIM 11 IS ALLOWABLE OVER THE MODESTE REFERENCE

Claim 11, which depends from claim 10 defines a web server which further "comprises a connection to a communications network." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not simply the connection with a communications network. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(2). CLAIM 12 IS ALLOWABLE OVER THE MODESTE REFERENCE

Claim 12, which depends from claim 11 requires that the "communications network is the Internet." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not the mere existence of a communications network. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(3). CLAIM 13 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server of claim 13, which depends from claim 10, requires that "internet protocols are provided for communication between the software modules and for communication between the software modules and components outside the web server." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not simply the provision of internet protocols for communication. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(4). CLAIM 14 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server according to Claim 14 "internet protocols are provided for communication between the software modules and for communication between the software modules and components outside the web server." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not simply the provision of internet protocols for communication. The

foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(5). CLAIM 15 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 15, which depends from claim 10, "is adapted for configuring and administrating the software modules." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not simply the feature of being adapted for configuring and administrating the software modules." The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(6). CLAIM 16 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 16, which depends from claim 11, "is adapted for configuring and administrating the software modules." It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system) that is claimed and not simply the feature of being adapted for configuring and administrating the software modules." The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(7). CLAIM 17 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 17, which depends from claim 13, is adapted for configuring and administrating the software modules. It is the combination of this feature (in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time

operating system) that is claimed and not simply the feature of being adapted for configuring and administrating the software modules." The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(8). CLAIM 18 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server of claim 18, which depends from claim 10, "the first software module comprises a connection with an industrial automation system." It is the combination of providing a connection with an industrial automation system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(9). CLAIM 19 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server according to Claim 19, which depends from claim 11, "the first software module comprises a connection with an industrial automation system." It is the combination of providing a connection with an industrial automation system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(10). CLAIM 20 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server according to Claim 20, which depends from claim 13, "the first software module comprises a connection with an industrial automation system." It is the combination of providing a connection with an industrial automation system, in a web server wherein at least one first software module comprises a first mechanism for implementing an

automation functionality and a second mechanism for accessing a real-time operating system, that is claimed.The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(11). CLAIM 21 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server according to Claim 21, which depends from claim 15, "the first software module comprises a connection with an industrial automation system." It is the combination of providing a connection with an industrial automation system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(12). CLAIM 22 IS ALLOWABLE OVER THE MODESTE REFERENCE

In the web server according to Claim 22, which depends from claim 10, "the web server comprises a connection to the internet using a firewall." It is the combination of providing a connection to the internet using a firewall, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(13). CLAIM 23 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 23, which depends from claim 11, "comprises a connection to the internet using a firewall." It is the combination of providing a connection to the internet using a firewall, in a web server wherein at least one first software module comprises a

first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(14). CLAIM 24 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 24, which depends from claim 13, "comprises a connection to the internet using a firewall." It is the combination of providing a connection to the internet using a firewall, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(15). CLAIM 25 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 25, which depends from claim 10 "is connected by a communications network to a web browser as an operating and monitoring system." It is the combination of providing connection by a communications network to a web browser as an operating and monitoring system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(16). CLAIM 26 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 26 "is connected by a communications network to a web browser as an operating and monitoring system." It is the combination of providing connection by a communications network to a web browser as an operating and monitoring

system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.

7E(17). CLAIM 27 IS ALLOWABLE OVER THE MODESTE REFERENCE

The web server according to Claim 27, which depends from claim 13, "is connected by a communications network to a web browser as an operating and monitoring system." It is the combination of providing connection by a communications network to a web browser as an operating and monitoring system, in a web server wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system, that is claimed. The foregoing combination further distinguishes over the prior art and the foregoing combination is not taught or suggested by the prior art.
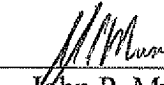
7F. CONCLUSIONS

Argument has been presented to demonstrate that the rejections under Sections 102 are deficient and that the dependent claims further distinguish over the prior art. The Examiner has argued rejections under Section 102 when claimed features (e.g., a web server having at least a first mechanism for implementing an automation functionality) are absent from the reference. Accordingly, there cannot be a rejection under Section 102 or under Section 103 and any efforts to reject the claims under Section 103 would amount to no more than a hindsight reconstruction of the prior art. In fact, although the Examiner has not acknowledged it, the rejections under Section 102 are a hindsight reconstruction of the prior art, while requisite teachings for the claimed invention are absent. For all of these reasons all of the rejections should be withdrawn and the claims should be allowed.

8.   APPENDICES

An appendix containing a copy of the claims involved in this appeal is provided herewith. No evidence appendix as required under 37CFR41.37(c)(1) (ix) or related proceedings appendix as required under 37CFR41.37(c)(1)(x) is provided because no such evidence or related proceeding is applicable to this appeal.

Respectfully submitted,

Dated: _____/ / / / / / 'l_____   By:_____/ / / / /Mus_____

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9. APPENDIX OF CLAIMS ON APPEAL - 37 CFR 41.37(c) (1) (ix)

CLAIMS

10. A web server comprising software modules, wherein at least one first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system.

11. The web server according to Claim 10, wherein the web server comprises a connection to a communications network.

12. The web server according to Claim 11, wherein the communications network is the Internet.

13. The web server according to Claim 10, wherein internet protocols are provided for communication between the software modules and for communication between the software modules and components outside the web server.

14. The web server according to Claim 11, wherein internet protocols are provided for communication between the software modules and for communication between the software modules and components outside the web server.

15. The web server according to Claim 10, wherein the web server is adapted for configuring and administrating the software modules.

16. The web server according to Claim 11, wherein the web server is adapted for configuring and administrating the software modules.

17. The web server according to Claim 13, wherein the web server is adapted for configuring and administrating the software modules.

18. The web server according to Claim 10, wherein the first software module comprises a connection with an industrial automation system.

19. The web server according to Claim 11, wherein the first software module comprises a connection with an industrial automation system.

20. The web server according to Claim 13, wherein the first software module comprises a connection with an industrial automation system.

21. The web server according to Claim 15, wherein the first software module comprises a connection with an industrial automation system.

22. The web server according to Claim 10, wherein the web server comprises a connection to the internet using a firewall.

23. The web server according to Claim 11, wherein the web server comprises a connection to the internet using a firewall.

24. The web server according to Claim 13, wherein the web server comprises a connection to the internet using a firewall.

25. The web server according to Claim 10, wherein the web server is connected by a communications network to a web browser as an operating and monitoring system.

26. The web server according to Claim 11, wherein the web server is connected by a communications network to a web browser as an operating and monitoring system.

27. The web server according to Claim 13, wherein the web server is connected by a communications network to a web browser as an operating and monitoring system.

28. An automation system comprising a web server, wherein the web server comprises software modules, wherein a first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system.

29. A computer program product comprising a web server comprising software modules, wherein a first software module comprises a first mechanism for implementing an automation functionality and a second mechanism for accessing a real-time operating system.

10. EVIDENCE APPENDIX - 37 CFR 41.37(c) (1) (ix)

None

11.   RELATED PROCEEDINGS APPENDIX - 37 CFR 41.37(c) (1) (x)

None